



wiSTAR Wireless Light Sensor INSTALLATION GUIDE

Hubbell Building Automation’s wiSTAR Light Sensor has built-in solar cells that draw on available ambient light to power themselves and can operate for days in total darkness. The Light Sensor is designed to operate for light levels from 0 to 94.8 footcandles (0 to 1020 LUX). This is a revolutionary product for daylight harvesting applications to meet energy saving initiatives. Optimally place the sensor in the desired lighted space, pair it with a wiSTAR receiver for load control and your installation is complete. The self-powered wireless light sensor design also overcomes the placement and coverage challenges of traditional light sensors. They may be mounted wherever needed without moving or installing new wiring or conduit.

FEATURES

- Daylight Harvesting: light sensor has both switched and dimmed capabilities, both are dependent on the application and Receivers used
- No Power Consumption: when enough natural light is available, solar power provides the energy to keep the device ON while sensor technology turns the lights OFF, eliminating additional expenses to the end user’s energy bill
- No External Power Required: with no wiring limitations, this enables the installer to place the sensor in the optimal location of any application to capture optimal daylight readings
- Self-Powered & Self-Charging: angled solar cells are optimal for light collection enabling the sensor to capture maximum ambient light over flat solar cells
- Quick Charge Time to Operation: self-powered technology enables the sensor to be operational after a minimum charge time of 1 minute
- True Wireless: sensors are self-powered and communicate with all wiSTAR and EnOcean Receivers via radio frequency
- No Additional Materials: self-powered wireless technology eliminates the need to pull additional wire and conduit making installation quick and easy while diminishing labor costs
- No External Power Required: exclusive “power-less” technology significantly reduces callbacks and maintenance for additional savings
- Days of Stored Power: solar panel provides power for the device to maintain a sufficient charge to operate for long periods of time without light
- Unlimited Energy Savings: wireless technology supports daylight harvesting and manual override options with no additional wiring

SPECIFICATIONS

Frequency	902 MHz
Photocell	0-94.8FC (0-1020 LUX)
Minimum Light Required to Charge	4FC (40 LUX)
Solar Cell Operating Range	4-100FC (40-1000 LUX)
Minimum Charge Time to Begin Operation	1 minute @ 20 FC (200 LUX)
Full Charge Time	~8 hours @ 100FC (1000 LUX)
Maintain Charge Time	3 hours per 24 hours @ 20 FC (200 LUX)
Operation Life at Full Charge	7 Days
Optional Battery Life	10 Years
Operating Temperature Range	32°F to 104°F (0°C to 40°C)
Storage Temperature Range	-4°F to 158°F (-20°C to 70°C)
Relative Humidity	0% to 95%, non-condensing
Usage	Indoor
Mounting Height	8-12 feet.

APPLICATIONS

- Retrofits
- New construction
- Restrooms
- Conference rooms
- Classrooms
- Private offices
- Executive offices
- Daycare facilities
- Daylight Harvesting
- Lighted Hallways
- Perimeter Zones



Equipment Needed for Installation:

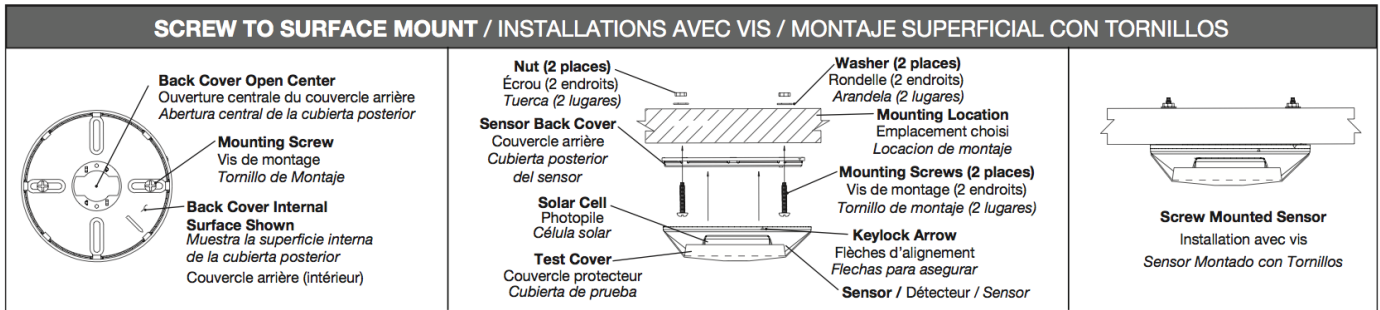
- Slotted Screwdriver
- Phillips screwdriver
- Double Sided Foam Mounting Tape (Included - for "screwless" mounting)
- Wall Anchors and Screws (Anchors Not included - for "screw to" mounting)
- Ceiling Tile Stem, Nut, & Washer (Included - for "ceiling tile" mounting)

Installation:

Wireless Light Sensors can be mounted using screws, adhesive foam, or ceiling tile mounted using the provided ceiling tile stem, nut, & washer.

Screw to Surface Mount:

1. Select location for mounting of sensor. If necessary, drill pilot holes into the mounting surface.
2. Use the included screws to mount the wireless light sensor to the surface (wall anchors [not included] can be used with these screws).
3. Remove the back cover of the sensor. Hold the back cover and body of the sensor and rotate until the two arrows line up and pull apart.
4. Install back cover of the ceiling sensor to desired location using the included screws, nuts and washers, or screws in combination with commercially available wall anchors.
5. Secure the sensor body to the back cover by aligning the arrows. Lock it by turning the sensor such that the arrows do not line up.
6. Rotate the sensor to the desired orientation.



Adhesive Surface Mount:

1. Remove backing material and apply double sided mounting tape to the Sensor Base.
2. Press and hold the Wireless Light Sensor to the desired mounting surface for a few seconds before releasing.

Ceiling Tile Mount:

1. Use the included ceiling tile stem to push through the ceiling tile in the desired location. Install the proper washer and nut above the ceiling tile to secure.
2. Connect Sensor Base to the stem and twist to secure, reference figures below for details.
3. Rotate the sensor to the desired orientation. Note that the sensor base and back cover are keyed. To lock the device in place, ensure that the arrows are not aligned.

